

In the Claims:

Please amend the claims as follows:

1. (currently amended) A wireless controller (4) for controlling-and/or monitoring a device (15) arranged relative an industrial robot (16), ~~characterised by comprising~~ wireless communication means including a processor (6) arranged with communication function means (10) for handling wireless communication to and from said device and control means (3) for carrying out at least one control function for one or more actuators of said device.
2. (currently amended) A The wireless controller according to claim 1, ~~characterised in that wherein~~ the control means (3) are comprised in part as one or more computer programs executable by means of said processor that handles the wireless communication functions.
3. (currently amended) A The wireless controller according to claim 1, ~~characterised in that wherein~~ the control means (3) is further arranged to process a signal from at least one sensor arranged with said device.
4. (currently amended) A The wireless controller according to claim 1, wherein any of ~~claims 1-3, characterised in that~~ it comprises a configurable hardware I/O interface (9).
5. (currently amended) A The wireless controller according to claim 4, ~~characterised in that wherein~~ the hardware input/output means (9) of the wireless controller are integrated in the

same unit as said processor.

6. (currently amended) ~~A~~ The wireless controller according to claim 1, ~~characterised in that~~ wherein the control means ~~(3)~~ further comprises program means for receiving and/or storing operational data of said device.

7. (currently amended) ~~A~~ The wireless controller according to claim 6, ~~characterised in that~~ wherein the wireless controller comprises memory means ~~(7)~~ for storage of operational data.

8. (currently amended) ~~A~~ The wireless controller according to claim 6, ~~characterised in that~~ wherein the control means further comprises computer program means ~~(3, 22)~~ for processing the operational data of said device.

9. (currently amended) ~~A~~ The wireless controller according to claim 6, ~~characterised in that~~ wherein the control means further comprises output means for communicating data dependent on the stored operational data to a display means.

10. (currently amended) ~~A~~ The wireless controller according to claim 6, ~~characterised in that~~ wherein the output means for communicating the stored operational data comprises an embedded web server.

11. (currently amended) ~~A~~ The wireless controller according to claim 9, ~~characterised in that~~ wherein the output means of the control means is configured to communicate the stored

operational data via the wireless communication means (10,11).

12. (currently amended) A The wireless controller according to claim 9, ~~characterised in that wherein~~ the output means of the control means may be configured to communicate with a supervisory robot control system using a message sent via any of the list of: SMS, a web address, a phone, a second robot control unit.

13. (currently amended) A The wireless controller according to claim 9, ~~characterised in that wherein~~ the output means of the control means is configured to send a communication to a human operator via any of a list of: SMS, a web address, a network address, a phone, a control unit.

14. (currently amended) A The wireless controller according to claim 1, ~~characterised in that wherein~~ the control means further comprises a control loop for receiving an input signal from a high level control system and generating a control signal to said device dependent on the input signal from the high level control system.

15. (currently amended) A The wireless controller according to claim 14, ~~characterised in that wherein~~ input/output signals of the control loop of the control means are compatible with a high level language.

16. (currently amended) A The wireless controller according to claim 6, ~~characterised in that wherein~~ the wireless controller comprises additional processor means (30) for receiving

and/or storing operational data of said device (15).

17. (currently amended) A The wireless controller according to claim 1, ~~characterised~~ by further comprising wireless communication means (10, 11) configured to operate according to a standard compatible issued by the Bluetooth SIG Inc.

18. (currently amended) A The wireless controller according to claim 17, ~~characterised~~ ~~in that~~ wherein wireless communication functions means (10) comprises protocol stack handling for both incoming and outgoing communications.

19. (currently amended) A The wireless controller according to claim 17, ~~characterised~~ by wherein handling wireless communication transmitted according to a protocol that emulates a serial transmission line.

20. (currently amended) A The wireless controller according to claim 1, ~~characterised~~ by further comprising means (19, 1, 10, 3) for providing wireless I/O functions between the robot control unit (18) and said device (15) arranged on or in relative proximity to the industrial robot (16).

21. (currently amended) A method for wireless control and/or monitoring of a device (15) arranged relative an industrial robot (16), ~~characterised by~~ comprising:
-sending a wireless signal (44) from a robot control unit (18) to said device mounted on or arranged in conjunction with said robot,

- receiving the signal by means of a wireless controller (1) arranged mounted on-or in conjunction with said device (15),
- processing the wireless signal in a processor (6) of the wireless controller,
- generating a second control signal (46) in the processor (6) and sending it to said device (15).

22. (currently amended) A The method according to claim 21, ~~characterised by further comprising~~ sending (47) the second control signal by means of a hardware I/O interface (9) of the wireless controller (1).

23. (currently amended) A The method according to claim 21, further comprising any of ~~claims 21-22, characterised by~~ storing operational data for said device in a memory means (7) of the wireless controller.

24. (currently amended) A The method according to claim 21, further comprising any of ~~claims 21-23, characterised by~~ storing in-signals and result signals sent out in a memory means (7) of the wireless controller.

25. (currently amended) A The method according to claim 21, further comprising any of ~~claims 21-24, characterised by~~ processing operational data and providing for a web client or a thin client data comprising any from the list of: signals, results, number of complete cycles, cycle time, statistical information, alarms.

26. (currently amended) A The method according to claim 21, further comprising any of

~~claims 21-25, characterised by providing operational data for a display means (20).~~

27. (currently amended) A The method according to claim 21, further comprising any of
~~claims 21-23, characterised by providing diagnostic information based on the operational data.~~

28. (currently amended) A The method according to claim 27, ~~characterised by further~~
comprising providing the diagnostic information arranged compatible with a web client or a thin
client.

29. (currently amended) A The method according to claim 28, ~~characterised by further~~
comprising providing the diagnostic information arranged compatible with a web browser or
telephone adapted web browser format including from the list of : XML, HTML, WML,
WBXML.

30. (currently amended) A The method according to claim 27, ~~characterised by further~~
comprising providing the diagnostic information arranged compatible with a Java applet.

31. (currently amended) A The method according to claim 21, further comprising any of
~~claims 21-30, characterised by downloading operational information and/or configuration data~~
stored in the wireless controller to a second wireless controller and/or second device neither of
which are mounted on the robot.

32. (currently amended) A The method according to claim 21, further comprising any of

~~claims 20-21, characterised by~~ providing wireless I/O functions between the robot control system (18) and the device (15) arranged on or in relative proximity to the industrial robot (16).

33. (currently amended) Use of a device according to claim 1 ~~any of claims 1-20~~ to control and/or monitor a device (15) arranged with an industrial robot (16) to carry out the operation of any one from the list of: welding, soldering, riveting, painting, gluing, folding plate, bending plate, hemming plate, gripping an object, manipulating an object.

34. (currently amended) Use of a device according to claim 1 ~~any of claims 1-20~~ to configure and/or calibrate a second wireless controller and/or a second device prior till use with a robot.

35. (currently amended) Use of a wireless controller according to claim 1 ~~any of claims 1-20~~ by a human operator to control and/or monitor a device (15) arranged with an industrial robot (16).

36. (currently amended) Use of a wireless controller according to claim 1 ~~any of claims 1-20~~ by means of a process running on one or more computers to supervise and/or control a device arranged with an industrial robot (16).

37. (currently amended) A computer program comprising computer code means and/or software code portions for making a computer or processor perform the steps of a method according to ~~any of claims 21-31~~ claim 21.

38. (currently amended) ~~A~~ The computer program product according to claim 37 comprised in one or more computer readable media.

39. (currently amended) A graphical user interface for controlling and/or monitoring and a device ~~(15)~~ arranged relative an industrial robot ~~(16)~~, ~~characterised in that~~ wherein a display for operational data of the device ~~(15)~~ is provided by a wireless controller ~~(1)~~ according to ~~any of~~ ~~claims 1-20~~ claim 1.

40. (currently amended) ~~A~~ The graphical user interface according to claim 39, ~~characterised in that~~ wherein the operational data values are provided by means of an embedded web server comprised in the control means ~~(3)~~ of the wireless controller.

41. (currently amended) ~~A~~ The graphical user interface according to claim 39, ~~characterised in that~~ wherein the operational data values displayed are combined with a graphical representation of a relevant production cell or part thereof.

42. (currently amended) ~~A~~ The graphical user interface according to claim 39, ~~characterised in that~~ wherein the operational data values displayed are arranged to be displayed upon activation of a part of the graphical representation of the relevant production cell or part thereof using a computer mouse, joystick, touch screen or similar computer display selection means.

43. (currently amended) A wireless controller (1) for controlling and/or monitoring a device (15) arranged relative an industrial robot (16), ~~characterised by~~ comprising wireless communication means including a processor (6) arranged with

- communication function software means (10) for handling a wireless protocol stack for communication to and from said device, and
- control means (3) for carrying out at least one control function for one or more actuators of said device.